FIG. 1

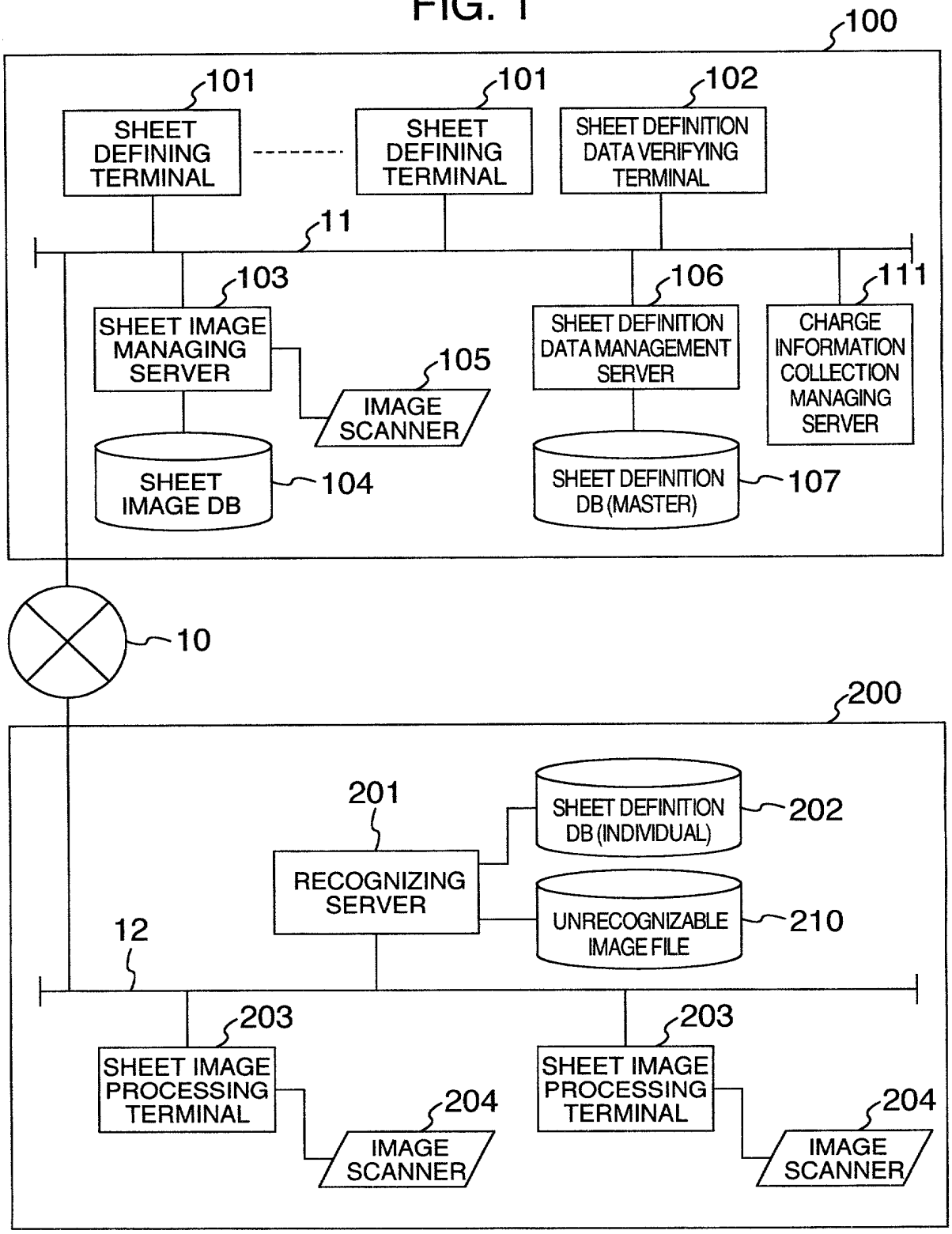

100
101
SHEET DEFINING TERMINAL
101
SHEET DEFINING TERMINAL
102
SHEET DEFINITION DATA VERIFYING TERMINAL
11
103
SHEET IMAGE MANAGING SERVER
105
IMAGE SCANNER
SHEET IMAGE DB
104
106
SHEET DEFINITION DATA MANAGEMENT SERVER
SHEET DEFINITION DB (MASTER)
107
111
CHARGE INFORMATION COLLECTION MANAGING SERVER
10
200
201
RECOGNIZING SERVER
SHEET DEFINITION DB (INDIVIDUAL)
202
UNRECOGNIZABLE IMAGE FILE
210
12
203
SHEET IMAGE PROCESSING TERMINAL
204
IMAGE SCANNER
203
SHEET IMAGE PROCESSING TERMINAL
204
IMAGE SCANNER

FIG. 2A

300

○○CITY INDIVIDUAL MUNICIPAL TAX RECEIPT

MUNICIPAL CODE	ACCOUNT NUMBER	NAME

FOR Y M	DESIGNATION NO.	PAID MONEY YEN

XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXX	FOR SALARY
	FOR RETIREMENT PAY
	FOR ARREARAGE
PAYMENT DUE Y M	
TOTAL	
PAYEE ADDRESS • NAME	SEAL OF PAID DATE

○○CITY INDIVIDUAL MUNICIPAL TAX PAYMENT SHEET

MUNICIPAL CODE	ACCOUNT NUMBER	NAME

FOR Y M	DESIGNATION NO.	PAID MONEY YEN

XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXX	FOR SALARY
	FOR RETIREMENT PAY
	FOR ARREARAGE
PAYMENT DUE Y M	
TOTAL	
PAYEE ADDRESS • NAME	SEAL OF PAID DATE

○○CITY INDIVIDUAL MUNICIPAL TAX PAID NOTICE

MUNICIPAL CODE	ACCOUNT NUMBER	NAME

FOR Y M	DESIGNATION NO.	PAID MONEY YEN

XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXX	FOR SALARY
	FOR RETIREMENT PAY
	FOR ARREARAGE
PAYMENT DUE Y M	
TOTAL	
PAYEE ADDRESS • NAME	SEAL OF PAID DATE

FIG. 2B

350

△△CITY INDIVIDUAL MUNICIPAL TAX RECEIPT

FOR Y M	DESIGNATION NO.	PAID MONEY YEN

XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXX	FOR SALARY
	FOR RETIREMENT PAY
	FOR ARREARAGE
PAYMENT DUE Y M	
TOTAL	

MUNICIPAL CODE	ACCOUNT NUMBER	NAME
PAYEE ADDRESS • NAME		SEAL OF PAID DATE

△△CITY INDIVIDUAL MUNICIPAL TAX PAYMENT SHEET

FOR Y M	DESIGNATION NO.	PAID MONEY YEN

XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXX	FOR SALARY
	FOR RETIREMENT PAY
	FOR ARREARAGE
PAYMENT DUE Y M	
TOTAL	

MUNICIPAL CODE	ACCOUNT NUMBER	NAME
PAYEE ADDRESS • NAME		SEAL OF PAID DATE

△△CITY INDIVIDUAL MUNICIPAL TAX PAID NOTICE

FOR Y M	DESIGNATION NO.	PAID MONEY YEN

XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXXXX XXXXXXX	FOR SALARY
	FOR RETIREMENT PAY
	FOR ARREARAGE
PAYMENT DUE Y M	
TOTAL	

MUNICIPAL CODE	ACCOUNT NUMBER	NAME
PAYEE ADDRESS • NAME		SEAL OF PAID DATE

FIG. 3A

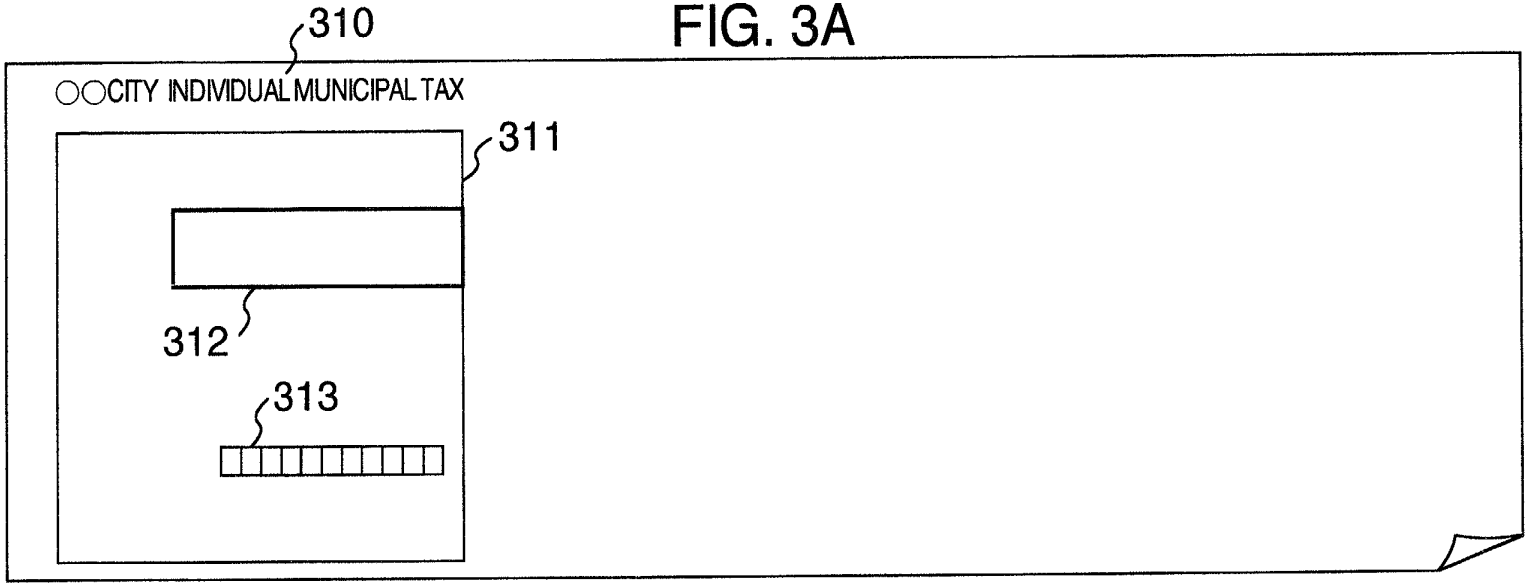

310
○○CITY INDIVIDUAL MUNICIPAL TAX
311
312
313

FIG. 3B

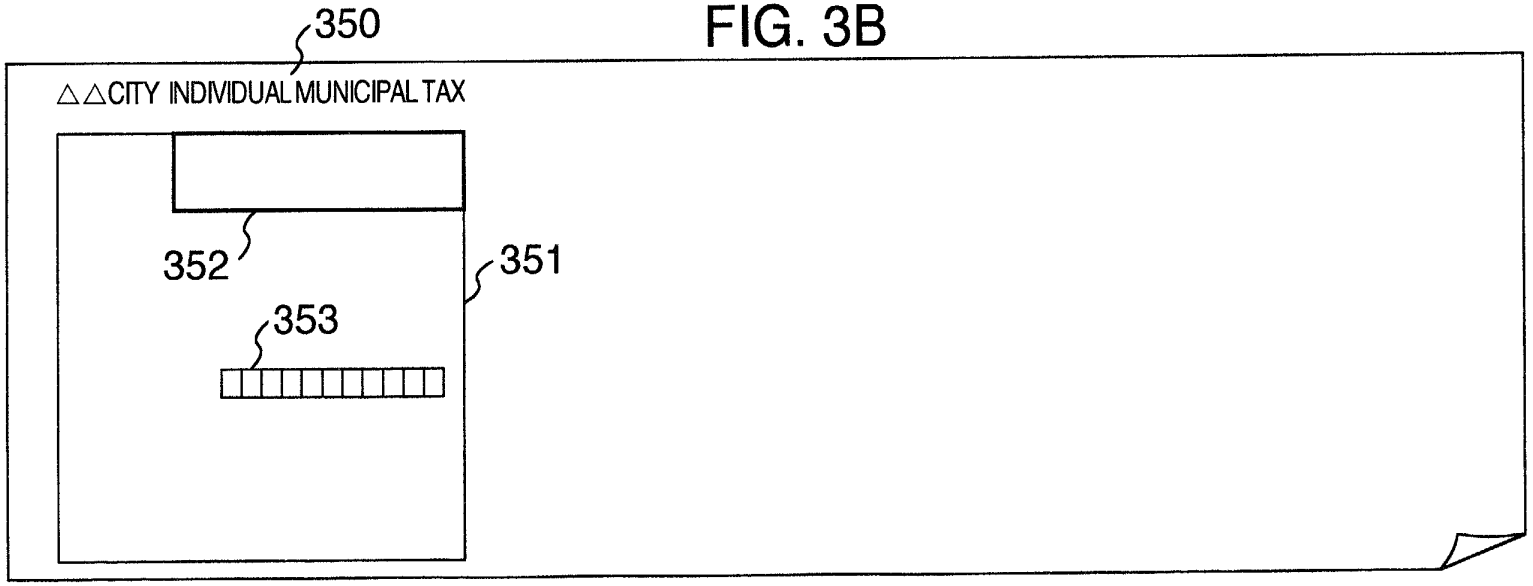

350
△△CITY INDIVIDUAL MUNICIPAL TAX
352
351
353

FIG. 4A

410

ITEM NAME		DATA
SHEET ID		Id-11
SIZE (x,y)		3000, 1200
CHARACTER 1	POSITION (x,y)	100,50
	CHARACTER STRING	○○CITY INDIVIDUAL MUNICIPAL TAX
RECTANGLE 1	START POSITION (x,y)	100,200
	END POSITION (x,y)	900,1250
RECTANGLE 2	START POSITION (x,y)	350,300
	END POSITION (x,y)	900,450
CONTINUOUS RECTANGLE 1	START POSITION (x,y)	450,800
	NUMBER OF CONTINUOUS RECTANGLES	11
	SIZE (x,y)	70,35

FIG. 4B

460

ITEM NAME		DATA
SHEET ID		Id-12
SIZE (x,y)		3000, 1200
CHARACTER 1	POSITION(x,y)	100,50
	CHARACTER STRING	△△CITY INDIVIDUAL MUNICIPAL TAX
RECTANGLE 1	START POSITION (x,y)	100,200
	END POSITION (x,y)	900,1250
RECTANGLE 2	START POSITION (x,y)	350,200
	END POSITION (x,y)	900,350
CONTINUOUS RECTANGLE 2	START POSITION (x,y)	450,700
	NUMBER OF CONTINUOUS RECTANGLES	11
	SIZE (x,y)	70,35

FIG. 5A

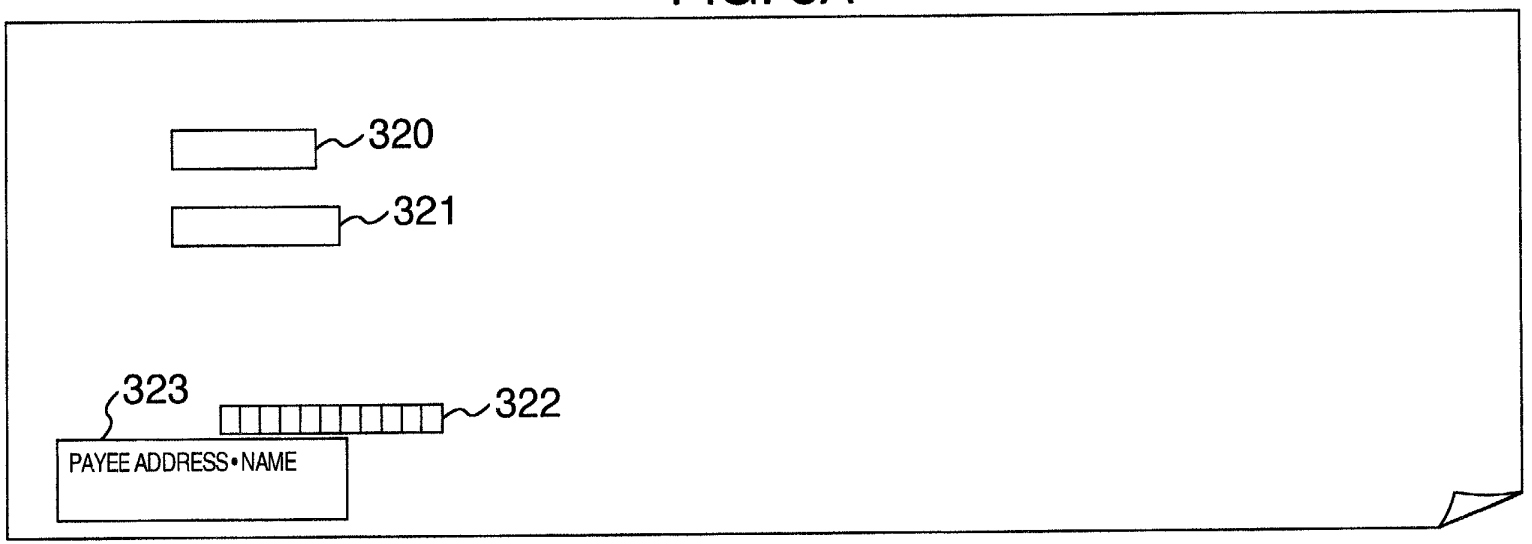

320
321
323
322
PAYEE ADDRESS • NAME

FIG. 5B

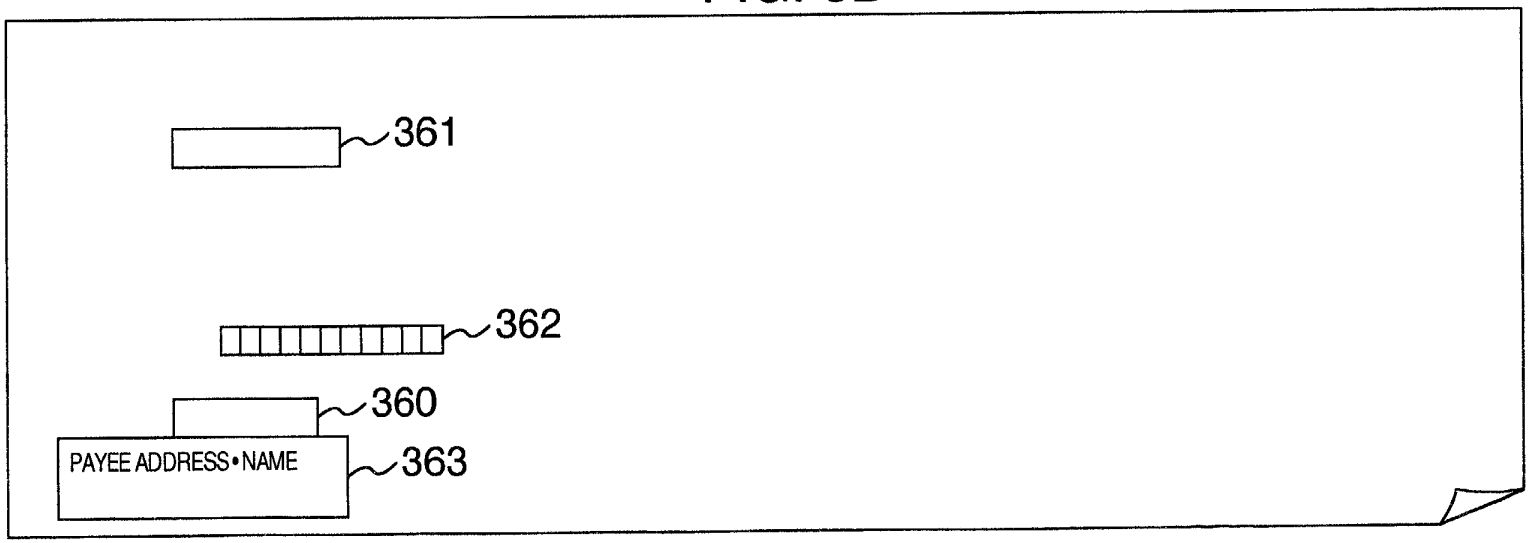

361
362
360
PAYEE ADDRESS • NAME
363

FIG. 6A

420

ITEM NAME			DATA
SHEET ID			Id-11
FIELD 1	FIELD ATTRIBUTE		ACCOUNT NO.
	FRAME TYPE		FIELD FRAME
	START POSITION (x,y)		350,225
	FRAME SIZE		300,75
	FONT TYPE		NUMERAL
FIELD 2	FIELD ATTRIBUTE		DESIGNATION NO.
	FRAME TYPE		FIELD FRAME
	START POSITION (x,y)		350,375
	FRAME SIZE		350,75
	FONT TYPE		NUMERAL
FIELD 3	FIELD ATTRIBUTE		MONEY AMOUNT
	FRAME TYPE		CHARACTER FRAME
	START POSITION (x,y)		450,800
	FRAME SIZE		35,70
	FONT TYPE		NUMERAL
	NUMBER OF CHARACTERS		11
FIELD 4	FIELD ATTRIBUTE		ADDRESS NAME
	FRAME TYPE		FIELD FRAME
	START POSITION (x,y)		100,900
	FRAME SIZE (x,y)		600,250
	FONT TYPE		IMAGE ONLY
	PRE-PRINT (DELETE)	START POSITION (x,y)	100,900
		END POSITION (x,y)	400,50

FIG. 6B

470

ITEM NAME			DATA
SHEET ID			Id-12
FIELD 1	FIELD ATTRIBUTE		ACCOUNT NO.
	FRAME TYPE		FIELD FRAME
	START POSITION (x,y)		350,825
	FRAME SIZE		300,75
	FONT TYPE		NUMERAL
FIELD 2	FIELD ATTRIBUTE		DESIGNATION NO.
	FRAME TYPE		FIELD FRAME
	START POSITION (x,y)		350,275
	FRAME SIZE		350,75
	FONT TYPE		NUMERAL
FIELD 3	FIELD ATTRIBUTE		MONEY AMOUNT
	FRAME TYPE		CHARACTER FRAME
	START POSITION (x,y)		450,700
	FRAME SIZE		35,70
	FONT TYPE		NUMERAL
	NUMBER OF CHARACTERS		11
FIELD 4	FIELD ATTRIBUTE		ADDRESS NAME
	FRAME TYPE		FIELD FRAME
	START POSITION (x,y)		100,900
	FRAME SIZE (x,y)		600,250
	FONT TYPE		IMAGE ONLY
	PRE-PRINT (DELETE)	START POSITION (x,y)	100,900
		END POSITION (x,y)	400,50

FIG. 7

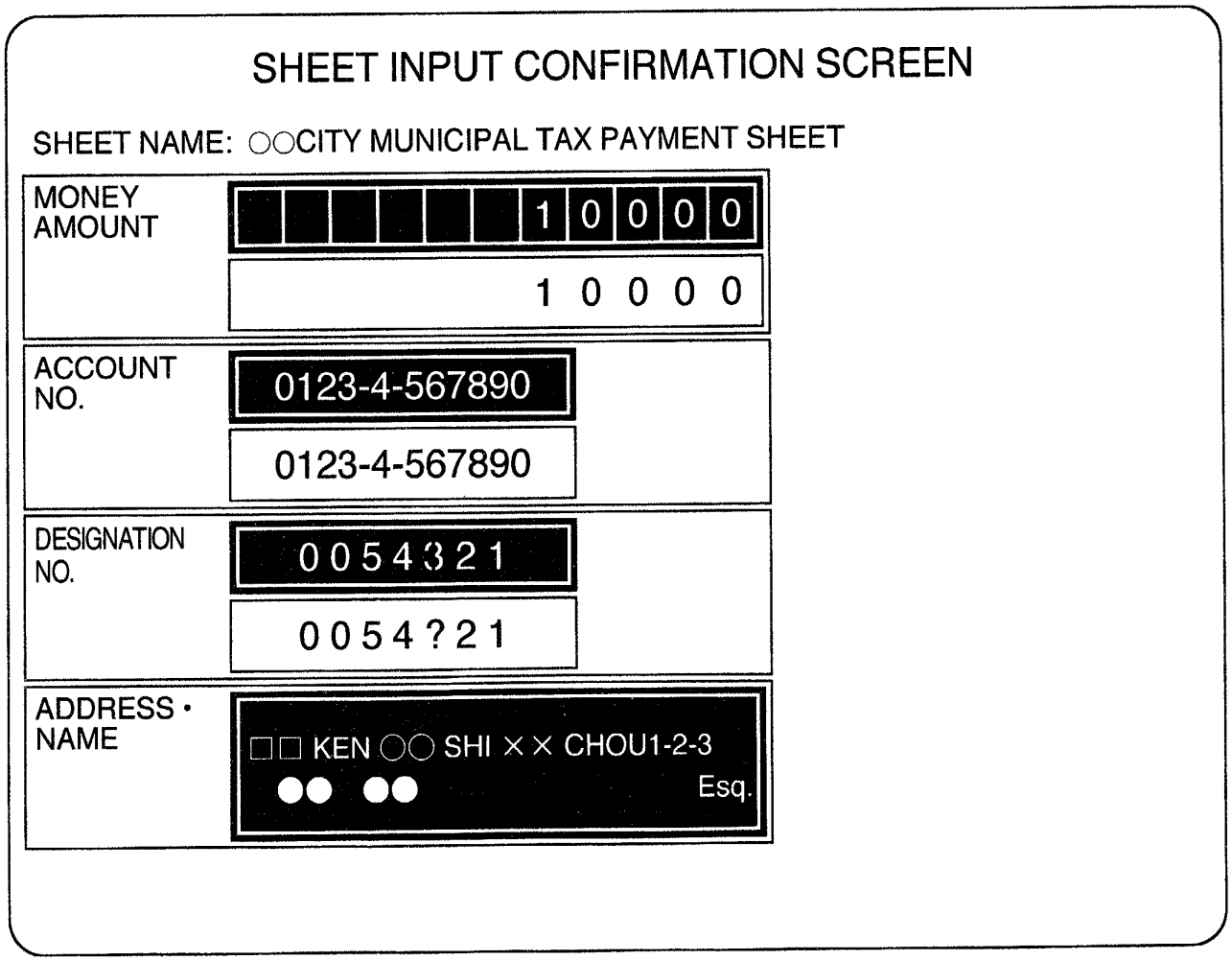

SHEET INPUT CONFIRMATION SCREEN
SHEET NAME: ○○CITY MUNICIPAL TAX PAYMENT SHEET
MONEY AMOUNT
10000
10000
ACCOUNT NO.
0123-4-567890
0123-4-567890
DESIGNATION NO.
0054321
0054?21
ADDRESS・NAME
□□ KEN ○○ SHI ×× CHOU1-2-3
●● ●● Esq.

FIG. 8

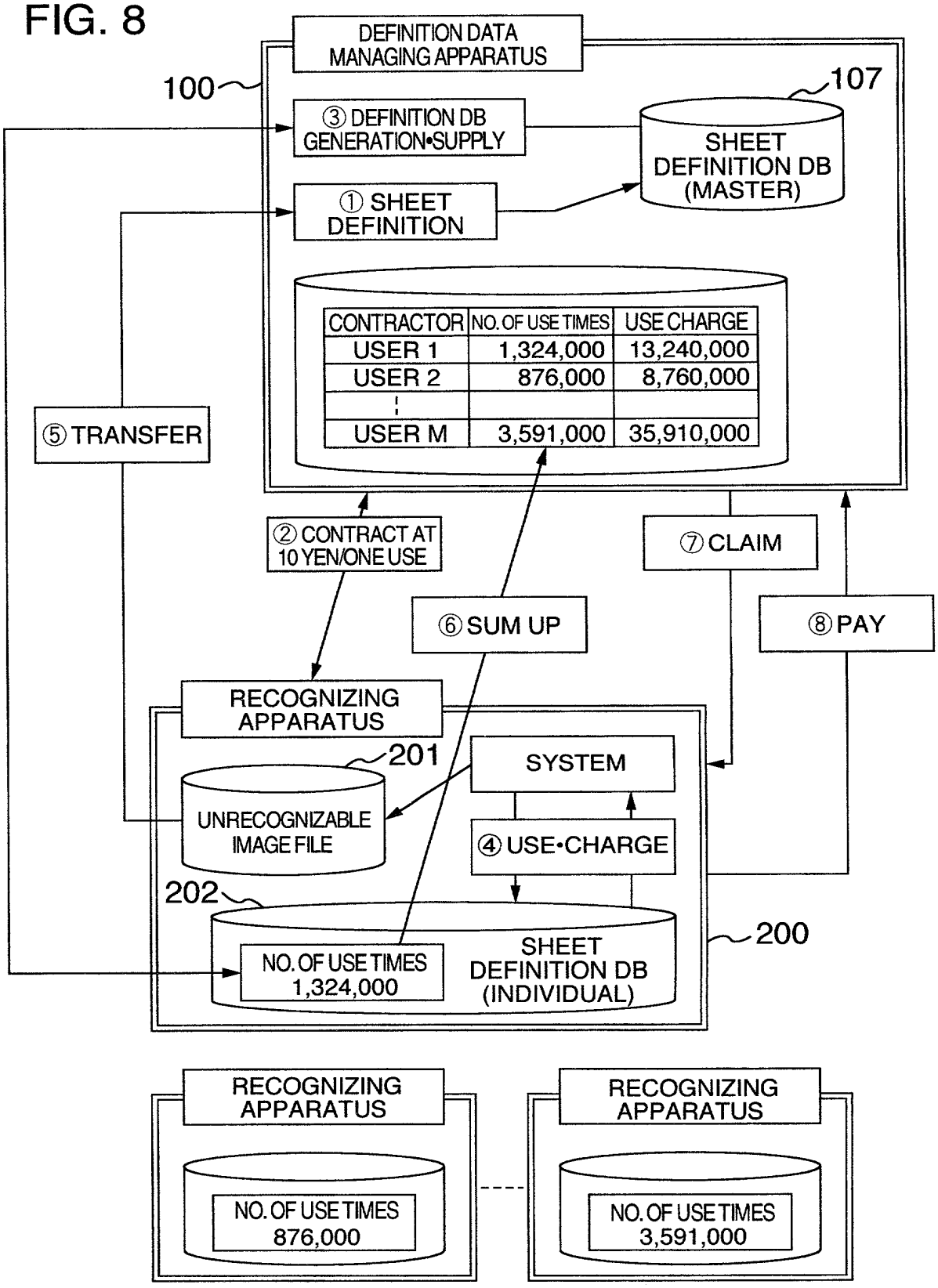

DEFINITION DATA MANAGING APPARATUS
100
107
③ DEFINITION DB GENERATION•SUPPLY
SHEET DEFINITION DB (MASTER)
① SHEET DEFINITION
CONTRACTOR
NO. OF USE TIMES
USE CHARGE
USER 1
1,324,000
13,240,000
USER 2
876,000
8,760,000
USER M
3,591,000
35,910,000
⑤ TRANSFER
② CONTRACT AT 10 YEN/ONE USE
⑦ CLAIM
⑥ SUM UP
⑧ PAY
RECOGNIZING APPARATUS
201
SYSTEM
UNRECOGNIZABLE IMAGE FILE
④ USE•CHARGE
202
200
NO. OF USE TIMES 1,324,000
SHEET DEFINITION DB (INDIVIDUAL)
RECOGNIZING APPARATUS
NO. OF USE TIMES 876,000
RECOGNIZING APPARATUS
NO. OF USE TIMES 3,591,000

FIG. 9

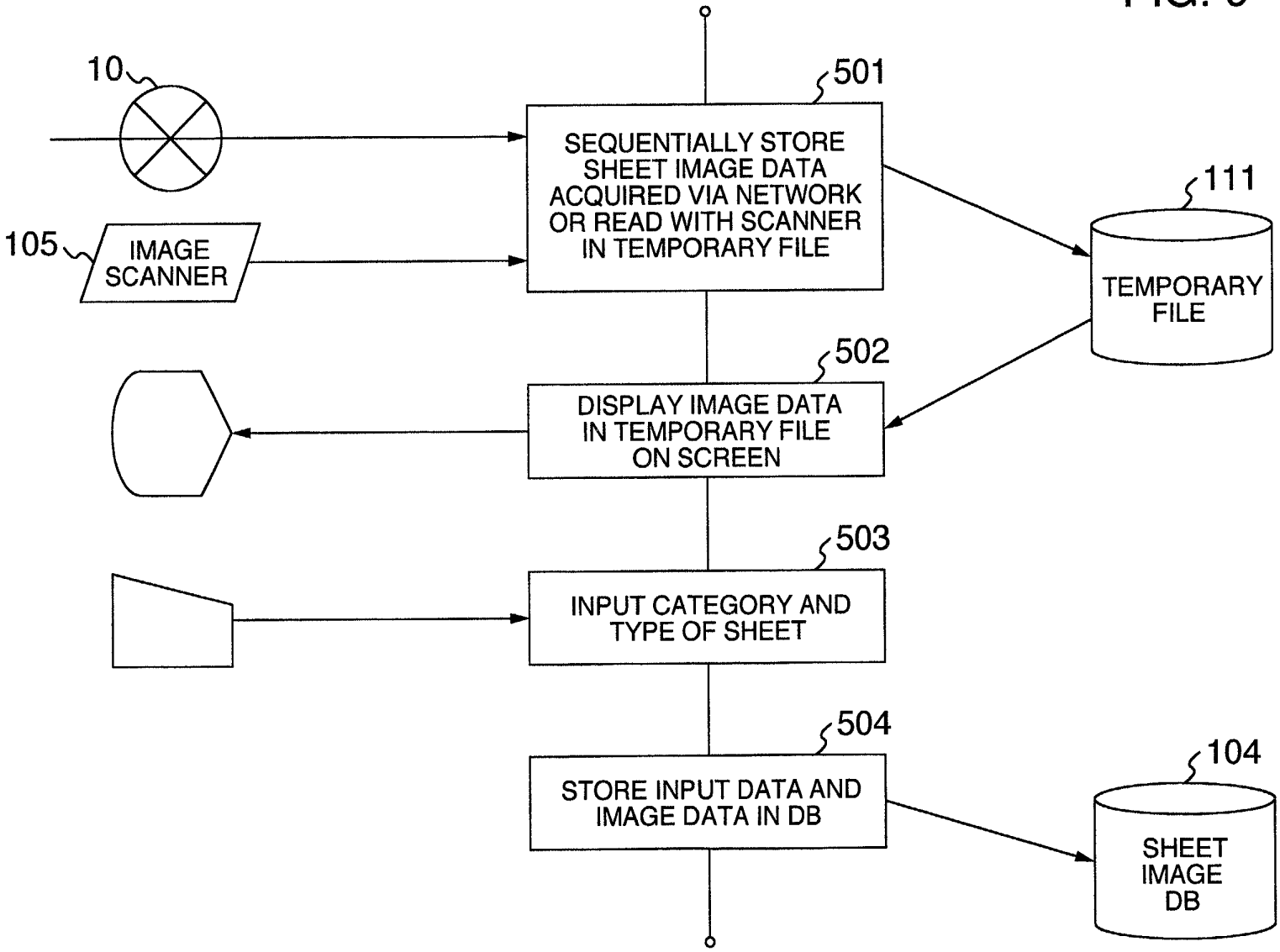

10
105
IMAGE SCANNER
501
SEQUENTIALLY STORE SHEET IMAGE DATA ACQUIRED VIA NETWORK OR READ WITH SCANNER IN TEMPORARY FILE
111
TEMPORARY FILE
502
DISPLAY IMAGE DATA IN TEMPORARY FILE ON SCREEN
503
INPUT CATEGORY AND TYPE OF SHEET
504
STORE INPUT DATA AND IMAGE DATA IN DB
104
SHEET IMAGE DB

FIG. 10

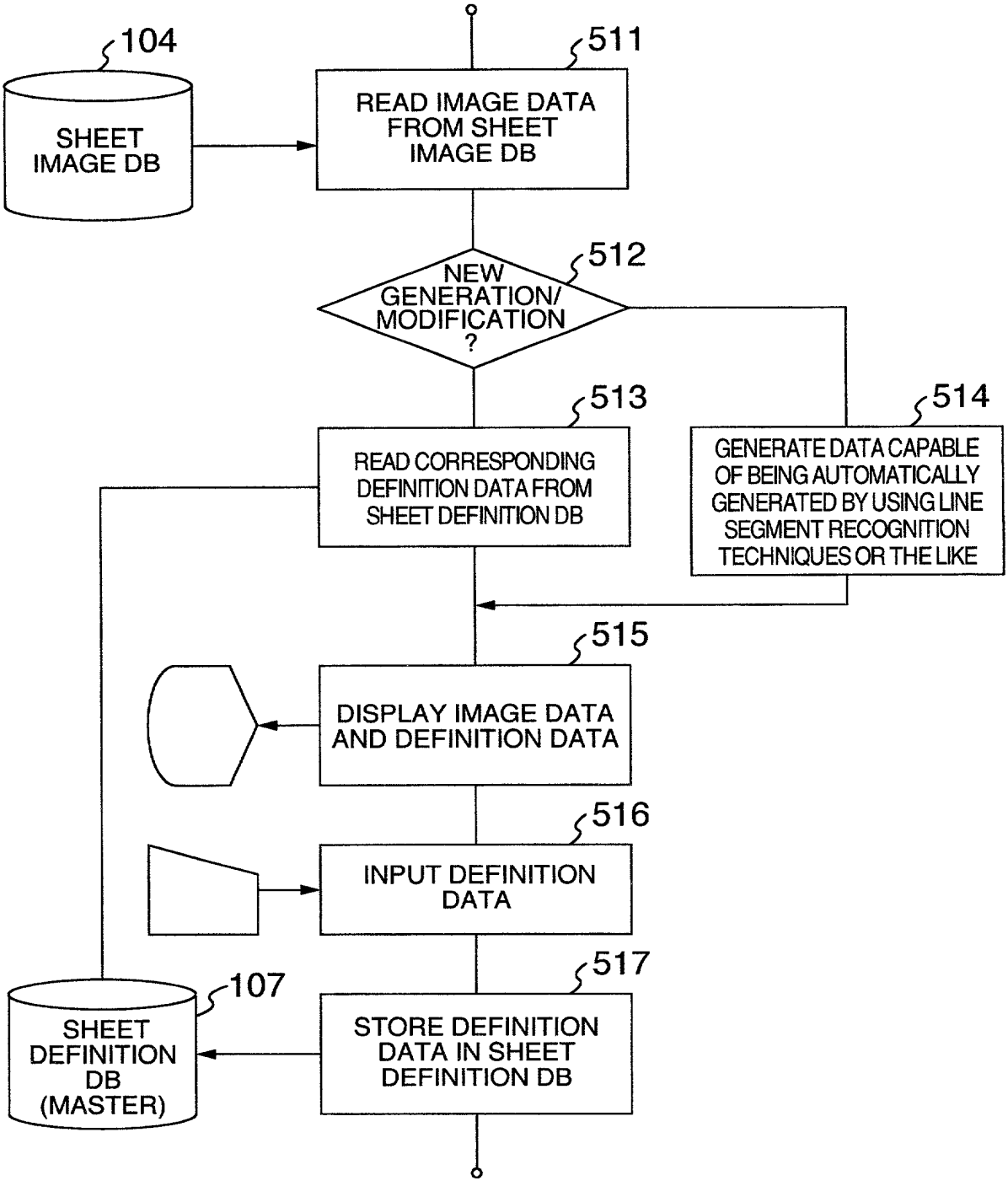

104
SHEET IMAGE DB
511
READ IMAGE DATA FROM SHEET IMAGE DB
512
NEW GENERATION/ MODIFICATION ?
513
READ CORRESPONDING DEFINITION DATA FROM SHEET DEFINITION DB
514
GENERATE DATA CAPABLE OF BEING AUTOMATICALLY GENERATED BY USING LINE SEGMENT RECOGNITION TECHNIQUES OR THE LIKE
515
DISPLAY IMAGE DATA AND DEFINITION DATA
516
INPUT DEFINITION DATA
517
STORE DEFINITION DATA IN SHEET DEFINITION DB
107
SHEET DEFINITION DB (MASTER)

FIG. 11

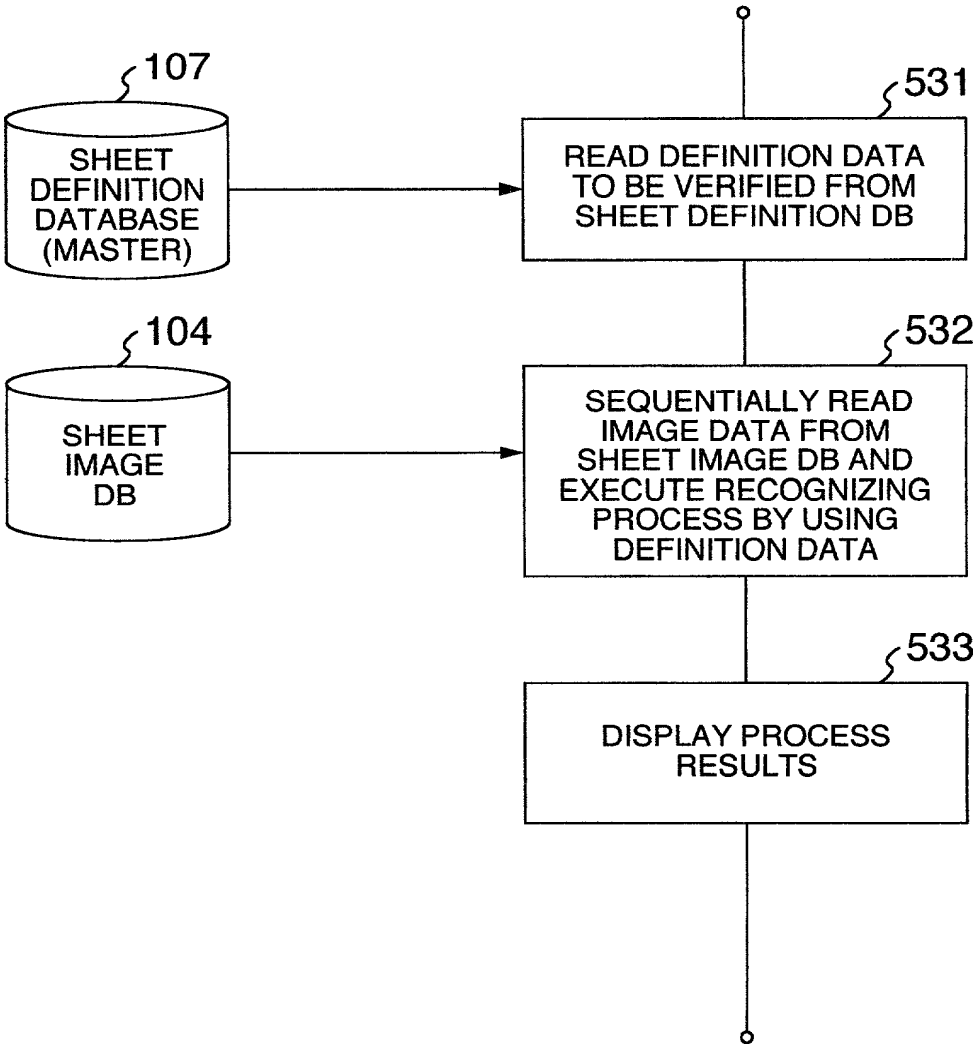

107
SHEET DEFINITION DATABASE (MASTER)
104
SHEET IMAGE DB
531
READ DEFINITION DATA TO BE VERIFIED FROM SHEET DEFINITION DB
532
SEQUENTIALLY READ IMAGE DATA FROM SHEET IMAGE DB AND EXECUTE RECOGNIZING PROCESS BY USING DEFINITION DATA
533
DISPLAY PROCESS RESULTS

FIG. 12

450

CLASSIFICATION	SHEET NAME	SHEET ID	RECOGNIZING APPARATUS1	RECOGNIZING APPARATUS2	----------	RECOGNIZING APPARATUS N
INHABITANT TAX	○○ CITY MUNICIPAL TAX	Id-11	○	○		○
	△△ CITY MUNICIPAL TAX	Id-12	○	○		
	⋮	⋮				
	name-1i	Id-1i	○			○
CATEGORY 2	name-21	Id-21		○		
	name-22	Id-22		○		△
	⋮	⋮				
	name-2j	Id-2j		○		
CATEGORY 3	name-31	Id-31	○			○
	name-32	Id-32	○			
	⋮	⋮				
	name-3k	Id-3k	○			
CATEGORY 4	name-41	Id-41	△			
	name-42	Id-42	△			
	⋮	⋮				
	name-4m	Id-4m	△			
⋮						
CATEGORY N	name-N1	Id-N1		○		
	name-N2	Id-N2		○		
	⋮	⋮				
	name-Nn	Id-Nn		○		△

FIG. 13

470

SHEET ID	NUMBER OF USE TIMES
Id-11	1,150
Id-12	3,200
⋮	
Id-1i	2
Id-31	10,580
Id-32	830
⋮	
Id-3k	4,170
Id-41	26,180
Id-42	37,220
⋮	
Id-4m	8,640

FIG. 14A

610

CLASSIFICATION	SHEET NAME	SHEET ID	RECOGNIZING APPARATUS 1	RECOGNIZING APPARATUS 2	------	RECOGNIZING APPARATUS N
INHABITANT TAX	○○ CITY MUNICIPAL TAX	Id-11	1,234	598		25
	△△ CITY MUNICIPAL TAX	Id-12	560	3,078		
	⋮	⋮				
	name-1i	Id-1i	32	407		77
CATEGORY 2	name-21	Id-21		1,885		
	name-22	Id-22		558		44,329
	⋮	⋮				
	name-2j	Id-2j		5,739		
CATEGORY 3	name-31	Id-31	4,100			37,210
	name-32	Id-32	987			
	⋮	⋮				
	name-3k	Id-3k	333			
CATEGORY 4	name-41	Id-41	676			
	name-42	Id-42	221			
	⋮	⋮				
	name-4j	Id-4m	2,001			
CATEGORY N	name-N1	Id-N1		11.673		
	name-N2	Id-N2		28.980		
	⋮	⋮				
	name-Nn	Id-Nn		68,231		7,468

FIG. 14B

611

		RECOGNIZING APPARATUS 1	RECOGNIZING APPARATUS 2	--------	RECOGNIZING APPARATUS N
TOTAL NUMBER OF USE TIMES		1,324,000	876,000		3,591,000
	CHARGED	1,012,000	876,000		2,591,000
	FREE	312,000	0		1,000,000
AMOUNT CLAIMED		10,120,000	8,760,000		25,910,000
SUMMING DATE		2000/4/1	2000/4/1		2000/4/1
DATE CLAIMED		2000/4/1	2000/4/1		2000/4/1
DATE OF PAYMENT		2000/4/20	2000/4/15		NOT YET

FIG. 15

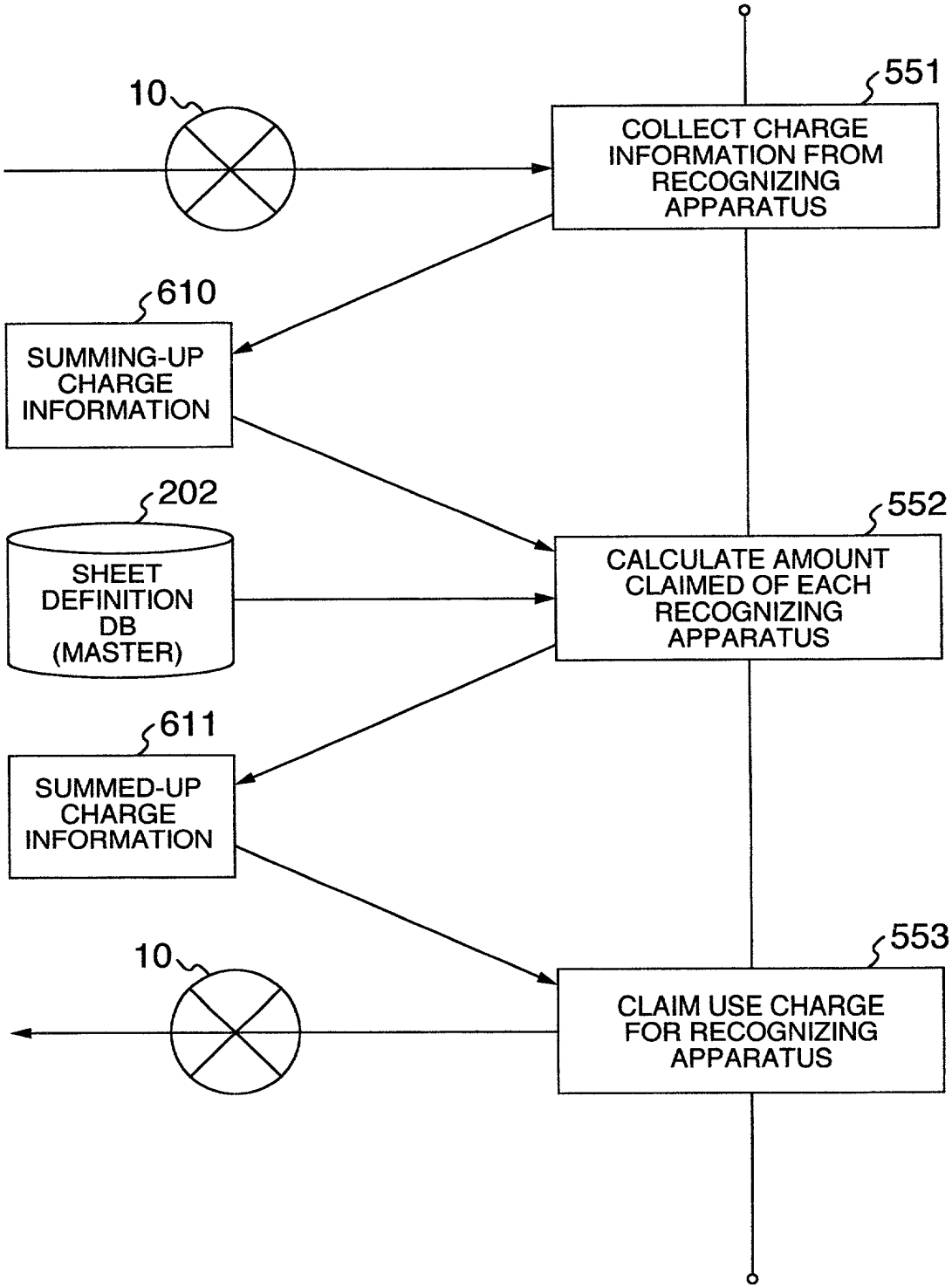
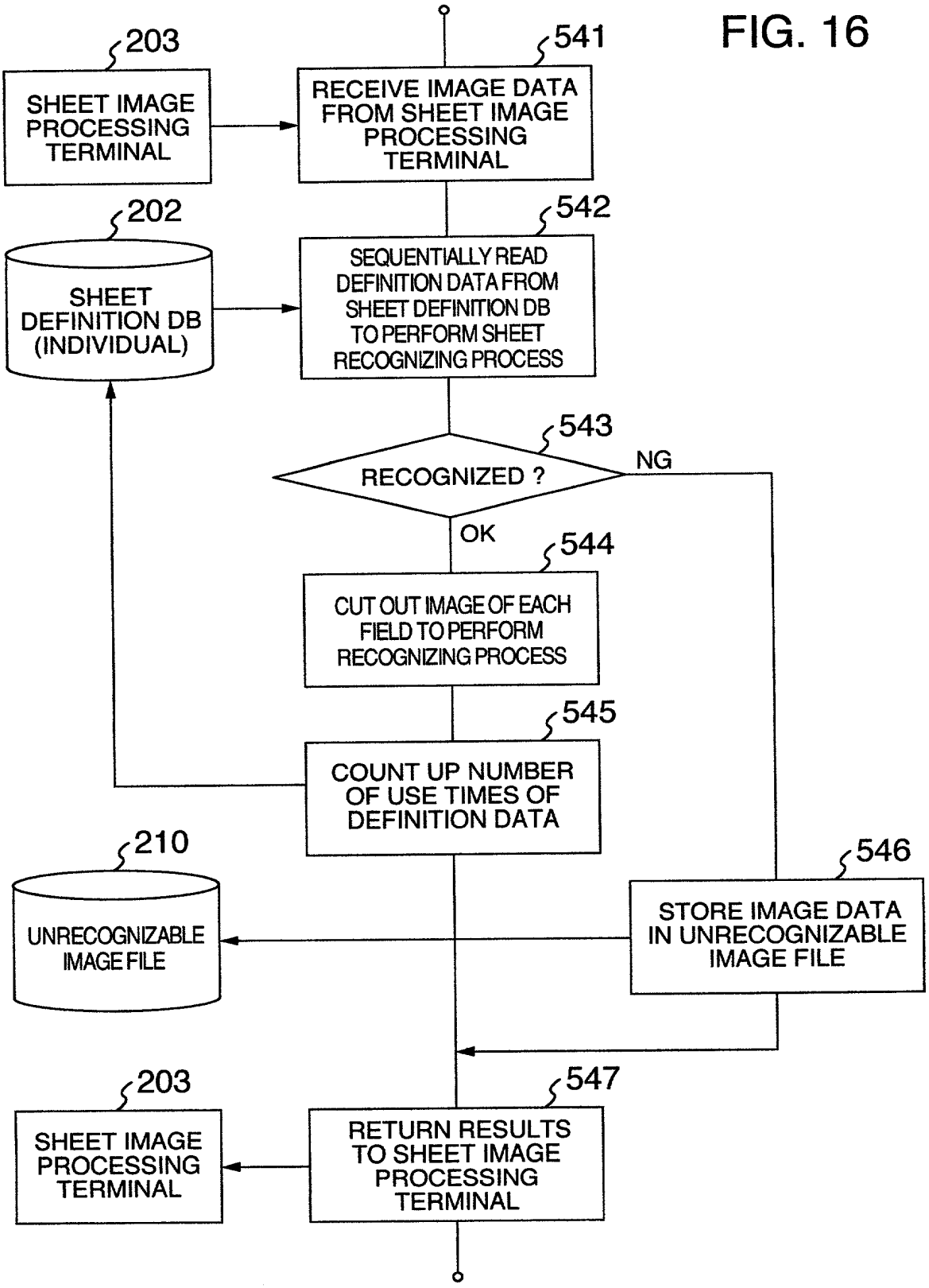

10
551
COLLECT CHARGE INFORMATION FROM RECOGNIZING APPARATUS
610
SUMMING-UP CHARGE INFORMATION
202
SHEET DEFINITION DB (MASTER)
552
CALCULATE AMOUNT CLAIMED OF EACH RECOGNIZING APPARATUS
611
SUMMED-UP CHARGE INFORMATION
10
553
CLAIM USE CHARGE FOR RECOGNIZING APPARATUS

FIG. 16


203
SHEET IMAGE PROCESSING TERMINAL
541
RECEIVE IMAGE DATA FROM SHEET IMAGE PROCESSING TERMINAL
202
SHEET DEFINITION DB (INDIVIDUAL)
542
SEQUENTIALLY READ DEFINITION DATA FROM SHEET DEFINITION DB TO PERFORM SHEET RECOGNIZING PROCESS
543
RECOGNIZED ?
NG
OK
544
CUT OUT IMAGE OF EACH FIELD TO PERFORM RECOGNIZING PROCESS
545
COUNT UP NUMBER OF USE TIMES OF DEFINITION DATA
210
UNRECOGNIZABLE IMAGE FILE
546
STORE IMAGE DATA IN UNRECOGNIZABLE IMAGE FILE
203
SHEET IMAGE PROCESSING TERMINAL
547
RETURN RESULTS TO SHEET IMAGE PROCESSING TERMINAL